CLAIMS

What is claimed is:

1. A method of processing data comprising:

a) synchronizing a software buffer index to a hardware buffer index by sequentially searching through a plurality of buffers containing data to find a second buffer with unprocessed data when said software buffer index points to a first buffer containing processed data; and

b) resetting said software buffer index to a next available buffer having processed data following said second buffer.

2. The method of processing data as described in Claim 1, wherein a) comprises:

synchronizing said hardware buffer index and said software buffer index in response to an interrupt indicating data has been stored in one of said plurality of buffers and is ready for processing.

3. The method of processing data as described in Claim 1, wherein a) further comprises:

ignoring a first interrupt indicating data has been stored in one of said plurality of buffers and is ready for processing when said software buffer index points to said first buffer containing processed data; and

synchronizing said hardware buffer index and said software buffer index in response to a second interrupt indicating data has been stored in one of said plurality of buffers and is ready for processing when said software buffer index points to said first buffer containing processed data for a second time.

4. The method of processing data as described in Claim 1, further comprising:

determining if said first buffer contains processed data; and

processing data in said first buffer if said data is unprocessed.

5. The method of processing data as described in Claim 1, wherein a) comprises:

wrapping around to a start buffer after searching the end buffer in said plurality of buffers when sequentially searching through said plurality of buffers, said plurality of buffers sequentially beginning with a start buffer and ending with an end buffer.

6. The method of processing data as described in Claim 1, further comprising:

stopping said searching in a) when reaching said first buffer without finding a buffer in said plurality of buffers with unprocessed data.

7. The method of processing data as described in Claim 1, wherein each of said plurality of buffers is a local area network (LAN) buffer for storing LAN packets of data.

8. The method of processing data as described in Claim 7, wherein said software buffer index is a LAN software buffer index, and said hardware buffer index is a LAN hardware buffer index.

9. The method of processing data as described in Claim 1, further comprising:

processing said unprocessed data in said second buffer.

10. A method of processing data comprising:

a) receiving an interrupt indicating data from a local area network (LAN) has been stored in one of a plurality of buffers and is ready for processing;

b) sequentially searching through said plurality of buffers containing data to find a second buffer with unprocessed data when a software buffer index points to a first buffer containing processed data; and

c) synchronizing said software buffer index to a hardware buffer index by resetting said software buffer index to a next available buffer having processed data following said second buffer.

11. The method of processing data as described in Claim 10, wherein said data from said LAN is a LAN packet.

12. The method of processing data as described in Claim 10, wherein a LAN driver performs a), b), and c).

13. The method of processing data as described in Claim 10, further comprising:

determining if said first buffer contains processed data; and

processing data in said first buffer if said data is unprocessed.

14. The method of processing data as described in Claim 10, further comprising:

stopping said searching in b) when reaching said first buffer without finding a buffer in said plurality of buffers with unprocessed data.

15. The method of processing data as described in Claim 10, further comprising:

processing said unprocessed data in said second buffer.

16. A computer system comprising:

a processor; and

a computer readable memory coupled to said processor and containing program instructions that, when executed, implement a method of processing data, comprising:

a) synchronizing a software buffer index to a hardware buffer index by sequentially searching through a plurality of buffers containing data to find a second buffer with unprocessed data when said software buffer index points to a first buffer containing processed data; and

b) resetting said software buffer index to a next available buffer having processed data following said second buffer.

17. The computer system as described in Claim 16, wherein a) in said method comprises:

synchronizing said hardware buffer index and said software buffer index in response to an interrupt indicating data has been stored in one of said plurality of buffers and is ready for processing.

18. The computer system as described in Claim 16, wherein a) in said method further comprises:

ignoring a first interrupt indicating data has been stored in one of said plurality of buffers and is ready for processing when said software buffer index points to said first buffer containing processed data; and

synchronizing said hardware buffer index and said software buffer index in response to a second interrupt indicating data has been stored in one of said plurality of buffers and is ready for processing when said software buffer index points to said first buffer containing processed data for a second time.

19. The computer system as described in Claim 16, wherein said method further comprises:

determining if said first buffer contains processed data; and

processing data in said first buffer if said data is unprocessed.

20. The computer system as described in Claim 16, wherein a) in said method comprises:

wrapping around to a start buffer after searching the end buffer in said plurality of buffers when sequentially searching through said plurality of buffers, said plurality of buffers sequentially beginning with a start buffer and ending with an end buffer.

21. The computer system as described in Claim 16, wherein said method further comprises:

stopping said searching in a) when reaching said first buffer without finding a buffer in said plurality of buffers with unprocessed data.

22. The computer system as described in Claim 16, wherein each of said plurality of buffers is a local area network (LAN) buffer for storing LAN packets of data.

23. The computer system as described in Claim 22, wherein said software buffer index is a LAN software buffer index, and said hardware buffer index is a LAN hardware buffer index.

24. The computer system as described in Claim 16, wherein said method further comprises:

processing said unprocessed data in said second buffer.